# U.I. Lapp GmbH PRODUCT INFORMATION & LAPP GROUP UNITRONIC® BUS PB 29.11.2013

Fixed installation













Automation



Halogen-free



Industrial machinery and plant engineering



**UV-resistant** 

### Info

Lapp Kabel is a member of the PROFIBUS User Organisation (PNO) A for Advanced here: UL and CSA approvals

### Application range

For fixed installationMaximum electromagnetic screening Dry or damp rooms

Item nos. 2170233, 2170333, 2170820, 2170824, 2170826 are all UV-resistant

## Design

FC: "Fast Connect" cable design P: PolyurethaneH: Halogen-free

PE: polyethylene, black Outer sheath, e.g. for the food and beverage industry

7-W: 7-wire, e.g. for applications where vibrations occur COMBI: Data transmission andpower supply in one cable

### Norm references / Approvals

In accordance with DIN 19245 and EN 50170, e.g. for SIEMENS SIMATIC NET, also suitable for FIP (Factory Instrumentation Protocol)

See below for UL approval type

### **Product features**

These bus cables can be used for PROFIBUS-DP as well as for PROFIBUS-FMS and FIP

Based on the bit rates listed, in accordance with PNO specifications the following maximum cable lengths for a bus segment apply(cable type A, PROFIBUS-DP):93.75 kbit/s = 1200 m187.5 kbit/s = 1000 m500 kbit/s = 400 m1.5 Mbit/s = 200 m12.0 Mbit/s = 100 m

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|                    |                             |       |

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### Remark

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

SIMATIC NET® is a registered trademark of Siemens AG

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Photographs are not to scale and do not represent detailed images of the respective products.

**Technical Data** 

Mutual capacitance: (800 Hz): max. 30 nF/km

Peak operating voltage: (not for power applications) 250 V

Conductor resistance: (loop): max. 133 ohm/km

Minimum bending radius: Fixed installation: see data sheet

Test voltage: Core/core: 1500 V rms

Characteristic impedance:  $150 \pm 15 \text{ Ohm}$ 

**Product Management** 

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| Part number              | Article designation                  | Number of pairs and conductor diameter (mm) | Outer diameter (mm) | Copper index (kg/km) | Weight (kg/km) |
|--------------------------|--------------------------------------|---|---------------------|----------------------|----------------|
|                          |                                      |   |                     |                      |                |
| For fixed installation - | conventional cable assembly          |   |                     |                      |                |
| 2170220                  | UNITRONIC® BUS PB                    | 1 x 2 x 0,64                                | 8.0                 | 30.1                 | 74             |
| 2170233                  | UNITRONIC® PB PE                     | 1 x 2 x 0,64                                | 8.0                 | 30.1                 | 57             |
| 2170226                  | UNITRONIC® BUS PB H<br>7-W           | 1 x 2 x 0,64                                | 8.0                 | 30.1                 | 55             |
| 2170225                  | UNITRONIC® BUS PB<br>COMBI 7-W       | 1 x 2 x 0,64 Ø + 3 x 1,0 mm <sup>2</sup>    | 9.8                 | 59.0                 | 92             |
| For fixed installation - | UL/CSA CMX approval                  |   |                     |                      | •              |
| 2170219                  | UNITRONIC® BUS PB A                  | 1 x 2 x 0,64                                | 8.0                 | 30.1                 | 57             |
| For fixed installation - | UL/CSA CMG approval                  |   | 1                   |                      | <b>-</b>       |
| 2170824                  | UNITRONIC® BUS PB 7-W<br>A           | 1 x 2 x 0,64                                | 8.0                 | 30.1                 | 55             |
| For fixed installation - | "Fast Connect" cable assembly        |   |                     |                      |                |
| 2170333                  | UNITRONIC® BUS PB PE<br>FC           | 1 x 2 x 0,64                                | 8.0                 | 26.0                 | 67             |
| For fixed installation - | UL/CSA CMX approval                  |   | 1                   |                      | <b>1</b>       |
| 2170330                  | UNITRONIC® BUS PB P FC               | 1 x 2 x 0,64                                | 8.0                 | 26.0                 | 71             |
|                          | ·                                    |   |                     | •                    |                |
| For fixed installation - | "Fast Connect" cable assembly - UL/C | SA CMG approval                             |                     |                      |                |
| 2170820                  | UNITRONIC® BUS PB FC                 | 1 x 2 x 0,64                                | 8.0                 | 26.0                 | 84             |
| 2170826                  | UNITRONIC® BUS PB 7-W<br>FC          | 1 x 2 x 0,64                                | 8.0                 | 26.0                 | 67             |
| 2170326                  | UNITRONIC® BUS PB-H FC               | 1 x 2 x 0 64                                | 8.0                 | 26.0                 | 72             |

| U.I. Lapp<br>GmbH | PRODUCT INFORMATION | <b>EAPP GROUP</b> |
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